Oklahoma **Grade 8 Content Standards**

FlyBy Math™ Alignment
Priority Academic Student Skills
Mathematics Content Standards

Standard 1: Algebraic Reasoning - The student will graph and solve linear equations and inequalities in problem-solving situations.	
Skills	***FlyBy Math*™ Activities**
1. Equations a. Model, write, and solve 2-step linear equations using a variety of methods. c. Predict the effect on the graph of a linear equation when the slope changes (e.g., make predictions from graphs, identify the slope in the equation y = mx + b and relate to a graph).	--Represent distance, speed, and time relationships for constant speed cases using linear equations and a Cartesian coordinate system. --Interpret the slope of a line in the context of a distance-rate-time problem.

Standard 2: Number Sense - The student will use numbers and number relationships to solve problems.	
Skills	***FlyBy Math*™ Activities**
1. Rational Numbers and Proportional Reasoning c. Apply ratios and proportions to solve problems.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

Standard 4: Measurement - The student will use measurement to solve problems in a variety of contexts.	
Skills	***FlyBy Math*™ Activities**
3. Formulas a. Select and apply appropriate formulas for given situations: I. an equation (e.g., d = rt, i = prt)	--Use the distance-rate-time formula to predict and analyze aircraft conflicts.

Standard 5: Data Analysis and Statistics - The student will use data analysis and statistics to interpret data in a variety of contexts.	
Skills	***FlyBy Math*™ Activities**
1. Select and apply appropriate formats (e.g., line plots, bar graphs, stem-and-leaf plots, scatter plots, histograms, circle graphs) to display collected data.	--Choose among tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.